

WHAT IS CLAIMED IS:

1. A DNA molecule comprising:

(1) a DNA sequence which encodes the MORT-1 protein, having the amino acid sequence of SEQ ID NO:2;

(2) a DNA sequence which encodes an analog of said MORT-1 protein which binds with the intracellular domain of the FAS ligand receptor (FAS-IC), which DNA sequence is capable of hybridization to the cDNA encoding SEQ ID NO:2 under moderately stringent conditions; or

(3) a DNA coding sequence consisting of a DNA sequence which encodes a fragment of said MORT-1 protein which binds with FAS-IC.

2. A DNA molecule in accordance with claim 1, comprising a DNA sequence encoding an analog of said MORT-1 protein which binds with FAS-IC, which DNA sequence is capable of hybridization to the cDNA encoding SEQ ID NO:2 under moderately stringent conditions.

3. A vector comprising a DNA sequence according to claim 1.

4. A vector according to claim 3 which is capable of being expressed in a eukaryotic host cell.

5. A vector according to claim 3 which is capable of being expressed in a prokaryotic host cell.

6. Transformed eukaryotic or prokaryotic host cells containing a vector according to claim 3.

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7. A method for producing a polypeptide which binds to the intracellular domain of the FAS-R, comprising growing the transformed host cells according to claim 6 under conditions suitable for the expression of an expression product from said cells, effecting post-translational modifications of said expression product as necessary for obtention of said polypeptide, and isolating said expressed polypeptide.

8. A polypeptide comprising:

(1) the MORT-1 protein having the amino acid sequence of SEQ ID NO:2;

(2) an analog of said MORT-1 protein which binds with the intracellular domain of the FAS ligand receptor (FAS-IC), which analog is encoded by a DNA sequence which is capable of hybridization to the cDNA encoding SEQ ID NO:2 under moderately stringent conditions; or

(3) a fragment of said MORT-1 protein which binds with FAS-IC.

9. A polypeptide in accordance with claim 8, comprising an analog of said MORT-1 protein which binds with FAS-IC, which analog is encoded by a DNA sequence capable of hybridization to the cDNA encoding SEQ ID NO:2 under moderately stringent conditions.

10. A pharmaceutical composition for the modulation of the FAS-R ligand-effect on cells comprising, as active ingredient, a polypeptide according to claim 8.

11. A pharmaceutical composition for modulating the FAS-R ligand-effect on cells comprising, as active ingredient, a recombinant animal virus vector encoding a protein capable of binding a cell surface receptor and encoding a polypeptide according to claim 8.

12. A method for the modulation of the FAS-R ligand effect on cells carrying a FAS-R, comprising treating said cells with one or more polypeptides according to claim 8, capable of binding to the intracellular domain and modulating the activity of said FAS-R, wherein said treating of said cells comprises introducing into said cells said one or more polypeptides in a form suitable for intracellular introduction thereof, or introducing into said cells a DNA sequence encoding said one or more polypeptides in the form of a

13. A method for modulation of the FAS-R ligand-effect on cells according to claim 12, comprising treating said cells with a single said polypeptide.

Figure 1: A schematic diagram of the proposed system. The system consists of a user, a server, and a database. The user sends a request to the server, which then queries the database. The database returns the results to the server, which then sends them back to the user. The server also stores the results in the database for future use.